



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/762,753	03/22/2001	Guido Graef	411076.90030	7472
26710	7590	04/20/2006	EXAMINER	
QUARLES & BRADY LLP 411 E. WISCONSIN AVENUE SUITE 2040 MILWAUKEE, WI 53202-4497				LAYE, JADE O
ART UNIT		PAPER NUMBER		
		2623		

DATE MAILED: 04/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/762,753	GRAEF, GUIDO	
	Examiner Jade O. Laye	Art Unit 2623	

— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 03 February 2006.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 5 and 6 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-16 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All
 - b) Some *
 - c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

Response to Amendment

- I. Applicant's amendments, dated 2/3/06, have been entered and made of record.

Response to Arguments

- II. Applicant's arguments filed 2/3/06 have been fully considered but they are unpersuasive.

Applicant argues *Dini* fails to meet the limitations of Claim 1, which require the system to “include only channels of the VHF/UHF range.” (Page 6, Appl. Response). The Examiner disagrees based upon a broader interpretation of *Dini*. Although *Dini* allows a user to enter an encoded satellite signal, this signal is subsequently decoded and transmitted only via a VHF/UHF frequency. Therefore, in essence, *Dini*'s system only includes channels in the VHF/UHF range.

Applicant's own argument further supports this position. On page 9 of the response, Applicant states, “In *Dini*... the receiving station is used to address satellite channels... and if such a channel is found, *the [satellite] image signals are then converted to one of the unused VHF channels.*” Thus, *Dini* can be read as excluding satellite channels and only including VHF/UHF channels. Accordingly, *Dini et al* disclose this portion of Claim 1.

Applicant goes on to argue *Dini* fails to disclose the use of a single modulator as recited in amended Claim 1. The Examiner agrees. However, Official Notice is taken that, at the time of Applicant's invention, modulators capable of processing multiple channels/frequencies were well known in this art. Accordingly, it would have been obvious to one having ordinary skill in

this art at the time of Applicant's invention to further modify the combined systems of *Dini* and *Ma* in order to provide a more cost efficient satellite signal reception system.

Applicant goes on to argue there was no motivation to combine *Dini* and *Ma*. Although not clear from the response, Applicant appears to base this argument on the amended "individual modulator" portion of Claim 1. Since this was addressed in the previous paragraph, this argument is moot.

Lastly, Applicant appears to argue the present proposed invention is limited to a "black box" setup, which performs the system processes transparent to the user and that *Dini* fails to disclose such a construction. Although this *may* be true, Applicant's claim language is not limited to such a narrowly tailored interpretation. Accordingly, the Examiner can only address such arguments, which are reflected in the claim language.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

III. Claims 1-4, 8-12, 15, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Dini et al* (EP 0288928) in view of *Ma et al.* (US Pat. No. 3,737,565).

Claim 1 recites limitations to numerous to list herein. The following rejection will address each element in turn.

As to element "a", *Dini* discloses an integrated receiving system capable of receiving both satellite and terrestrial broadcast programming, demodulating the satellite signals to

VHF/UHF range, and comprises a house antenna cable capable of receiving UHF/VHF transmissions. (Col. 1, Ln. 1-55 & Fig. 1).

As to elements “b” and “c”, *Dini* further discloses the use of a television, comprising an output socket, located separate from the satellite receiver. (Fig. 1). (The arrow pointing in the upstream direction indicates the output socket.) It is inherent the system components are connected via a house antenna cable (i.e., coaxial, etc.--because the system as disclosed is not capable of wireless transmission between components) and both the satellite receiver and television set have a house antenna connection. (Fig. 1).

As to element “d”, *Dini* further teaches the system contains various controllers, which generate control signals for the satellite receiver. These controllers can be integrated into the television or located separate from the television. Moreover, *Dini* discloses the system allows the user to select said VHF/UHF/Satellite channels via one remote control as recited in amended Claim 1. (Col. 5, Ln. 39-58 thru Col. 6, Ln. 1-10, 37-39; Fig. 1).

But, *Dini* fails to specifically disclose the limitations recited in elements “e” and “f.” However, within the same field of endeavor, *Ma* discloses a signal detector/search tuning system in which the system begins searching a frequency range in response to a momentary contact of a “start” switch (i.e., start signal). (Col. 1, Ln. 5-30). This start signal is generated after the system detects engagement of the television. (Col. 2, Ln. 60-67 thru col. 3, Ln. 1-56). Although *Ma* only addresses searching for signals in the UHF/VHF range, searching for channels in the satellite range would have been an obvious variant.

Moreover, *Ma* further teaches the system sends a recognition signal to the frequency scanner signaling the scanner to stop (Col. 3, Ln. 10-56) and contains a signal detector, which

detects the presence of an *image* signal and generates the stop signal (i.e., recognition signal) in response. (Col. 3, Ln. 10-56). Accordingly, it would have been obvious to one of ordinary skill in this art at the time of applicant's invention to combine the systems of *Dini* and *Ma* in order to provide a system capable of search tuning a satellite and terrestrial receiver, thereby providing the user with a system which smoothly integrates both broadcast signals.

[Note: the Arguments/Official Notice discussed in the response section above are incorporated into the rejection of Claim 1.]

Claim 2 recites the satellite television signal receiving stations of claim 1, characterized by the fact that the video signal output socket is a Euro-AV socket. (Note: Euro-AV socket is also referred to in the art as a "SCART" socket). As discussed above, the combined systems of *Dini* and *Ma* contain the limitations of claim 1, and *Dini* further teaches the use of a television comprising a SCART socket. (Col. 2, Ln. 5-15). Accordingly, the combined systems of *Dini* and *Ma* contain all limitations of claim 2.

Claim 3 recites the satellite television receiving station of claim 1, characterized by the fact that the control signals generated from the satellite receiver control module for the satellite receiver are transmitted via the house antenna cable, the ac power *Mains*, or a signal connection provided between the television set and satellite receiver to the satellite receiver and that the satellite receiver is prescribed to receive control signals generated by the satellite receiver control module. As discussed above, the combined systems of *Dini* and *Ma* contain all limitations of claim 1, and *Dini* further teaches that controller 13 sends control signals to controller 6 (which forms part of the satellite receiver) via the house antenna cable in order to perform the functions of the system. (Col. 5, Ln. 39-58 thru Col. 6, Ln. 1-10 & Fig. 1). Therefore, the satellite receiver

is prescribed to receive control signals from the control module. Accordingly, the combined systems of *Dini* and *Ma* contain all limitations of claim 3.

Claim 4 recites the satellite television signal receiving station of claim 1, characterized by the fact that the satellite receiver control module is arranged outside of the television housing and that *image* signals are fed to the satellite receiver control module via the Euro-AV socket of the television set, the *image* signals corresponding to the *image* signals displayed on the screen of the television set. As discussed above, the combined systems of *Dini* and *Ma* contain all limitations of claim 1, and *Dini* further discloses that controller 13 can be arranged outside of the television and that the television can transmit data upstream. (Fig. 1). It is inherent this upstream data contain *image* signals which correspond to those on the television because the controller must monitor events such as channel changes in order to notify the system to engage switching. Lastly, as discussed above, *Dini* teaches the television can contain a SCART socket. (Col. 5, Ln. 5-15). Accordingly, the combined systems of *Dini* and *Ma* contain all limitations of claim 4.

Claim 8 recites the satellite television signal receiving station of claim 1, characterized by the fact that the satellite receiver has the means to introduce a code signal into the television signal. As discussed above, the combined system of *Dini* and *Ma* contain all limitations of claim 1, and *Dini* further teaches controller 6 (i.e., satellite receiver) encodes the signal with various data such as the desired channel number and conversion channel number. (Col. 5, Ln. 39-58 thru Col. 6, Ln. 1-10). Therefore, the combined system of *Dini* and *Ma* contain all limitations of claim 8.

Claim 9 recites the satellite television signal receiving station according to claim 8, characterized by the fact that the satellite receiver control module has a detector that detects the presence of the code signal in the television signals present at the Euro-AV socket and generates the search stop signal only when the code signal is present. As discussed above, the combined systems of *Dini* and *Ma* contain all limitations of claim 8, and *Ma* further teaches the system sends a recognition signal to the frequency scanner signaling the scanner to stop. (Col. 3, Ln. 10-56). This teaching, coupled with the teaching of *Dini* discussed under the rejection of claim 8, will render a system that only generates a stop signal when a recognition signal is detected. Accordingly, the combined systems of *Dini* and *Ma* contain all limitations of claim 9.

Claim 10 recites the satellite television signal receiving station according to claim 1, characterized by the fact that the satellite receiver control module is arranged within the television receiver housing. As discussed above, the combined systems of *Dini* and *Ma* contain all limitations of claim 1, and *Dini* further teaches the controller can be located within the television. (Col. 6, Ln. 49-53). Therefore, the combined systems of *Dini* and *Ma* contain the limitations of claim 10.

Claim 11 recites the satellite television signal receiving station of claim 10, characterized by the fact that the satellite receiver control module is the microcomputer of the television receiver. As discussed above, the combined systems of *Dini* and *Ma* contain all limitations of claim 10, and *Dini* further teaches the controller located within the television can be a microprocessor. (Col. 6, Ln. 34-48). Therefore, the combined systems of *Dini* and *Ma* contain the limitations of claim 11.

Claim 12 recites the satellite television signal receiving system of claim 1, and further limitations too numerous to recite herein. As discussed above, the combined systems of *Dini* and *Ma* contain all limitations of claim 1, and *Dini* further teaches the system controller can be programmed to store all free VHF/UHF channels in a user location and can detail what UHF/VHF channels correspond to what satellite channels. (Col. 5, Ln. 39-58 thru Col. 6, Ln. 1-16). Accordingly, the combined system of *Dini* and *Ma* contain all limitations of claim 12.

Claim 15 recites the satellite television signal receiving system of claim 1, characterized by the fact that the television set and the satellite receiver have a common operating unit. Applicant's specification is unclear as to what is the scope of "operating unit." However, the examiner interprets the term to mean any system component capable of performing some operation. As discussed above, the combined systems of *Dini* and *Ma* contain all limitations of claim 1, and *Dini* further discloses the television set and satellite receiver have a common operating unit in controller 13. (Fig. 1). Accordingly, the combined system of *Dini* and *Ma* contain all limitations of claim 15.

Claim 16 recites the satellite television signal receiving system of claim 15, characterized by the fact that channel selection for terrestrial television signal reception and satellite television signal reception occurs through the numerical keyboard of the common operating unit without requiring a switching process between terrestrial reception and satellite reception. As discussed above, the combined systems of *Dini* and *Ma* contain all limitations of claim 15, and *Dini* further teaches the use of a command unit with numbered keys (i.e., numerical keyboard) which is used to perform the system operations, thereby allowing the user to channel surf cable and terrestrial

broadcast without having to physically switch the cables, sources, etc. Accordingly, the combined system of *Dini* and *Ma* contain all limitations of claim 16.

IV. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Dini* in view of *Ma* as applied to claim 3 above, and further in view of *Chateau*. (US Pat. No. 5,905,941).

Claim 7 recites the satellite television signal receiving station according to claim 3, characterized by the fact that the control signals are transmitted in the form of a 22 KHz switching signal. As discussed above, the combined systems of *Dini* and *Ma* contain all limitations of claim 3, but fail to specifically recite the limitation of claim 7. However, within the same field of endeavor *Chateau* discloses a similar system in which control receivers transmit 22 KHz switching signals upstream. (Col. 5, Ln. 16-27). Therefore, it would have been obvious to one of ordinary skill in this art at the time of applicant's invention to combine the systems of *Dini*, *Ma*, and *Chateau* in order to provide a system capable of effective switching.

V. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Dini* in view of *Ma* as applied to claim 1 above, and further in view of *Chateau*. (US Pat. No. 5,905,941).

Claim 13 recites the satellite television signal receiving station of claim 1, characterized by the fact that it has several satellite receivers, several television sets, and several satellite receiver control modules. As discussed above, the combined systems of *Dini* and *Ma* contain all limitations of claim 1, but fail to specifically disclose whether the combined system can be used in a larger system. (But, an obvious rejection could possibly be made). However, within the

same field of endeavor, *Chanteau* discloses a system comprising multiple satellite receivers, television sets, and control modules. In light of this disclosure, using the combined system of *Dini* and *Ma* would have been an obvious modification. Accordingly, the combined systems of *Dini*, *Ma*, and *Chanteau* contain all limitations of claim 13.

Claim 14 recites the satellite television signal receiving station of claim 13, characterized by the fact that the control signals generated by the satellite receiver control modules are provided with a code signal for the satellite receiver control modules generating the corresponding control signal. As discussed above, the combined systems of *Dini*, *Ma*, and *Chanteau* contain all limitations of claim 14, and *Chanteau* further teaches that the control modules generate digital codes representing messages to be transmitted throughout the system. (Col. 3, Ln. 54-64). Accordingly, the combined systems of *Dini*, *Ma*, and *Chanteau* contain all limitations of claim 14.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

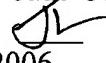
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jade O. Laye whose telephone number is (571) 272-7303. The examiner can normally be reached on Mon. 7:30am-4, Tues. 7:30-2, W-Fri. 7:30-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner: Jade O. Laye
Initials: 
April 12, 2006.


CHRIS KELLEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600